

Wei Yuan

Institute of Mathematics
Academy of Mathematics and Systems Science
No.55 Zhongguancun East Road, Beijing, China (100190)

Work Phone: (86-10) 6255-3362
Mobile Phone: (86) 13691205628
E-mail: wyuan@math.ac.cn

Education

- 2003-2009** Ph.D. in Pure Mathematics, University of Chinese Academy of Sciences, Beijing, China.
Thesis: Kadison-Singer Algebras
Advisor: Prof. Liming Ge
- 2006-2009** Ph.D. in Pure Mathematics, University of New Hampshire, NH, USA.
Thesis: Kadison-Singer Algebras
Advisor: Prof. Liming Ge
- 1999-2003** B.S. in Mathematics, University of Science and Technology of China.

Experience

- 2009-present** Institute of Mathematics AMSS, Assistant Professor.
- 2013.8-2013.12** University of New Hampshire, Visiting Scholar.
- 2006-2008** University of New Hampshire, Teaching Assistant.

Fields of Research Interest

Operator algebras and related topics

Research

Published research articles

10. W. Wu and W. Yuan, A remark on central sequence algebras of the tensor product of II_1 factors, Proc. Amer. Math. Soc. to appear.
9. W. Wu and W. Yuan, On generators of abelian Kadison-Singer algebras in matrix algebras, Linear Algebra and its Applications, Vol 440, 197-205, 2014.
8. A. Dong, W. Wu and W. Yuan, On small subspace lattices in Hilbert space, Journal of the Australian Math Society, published online 2013.
7. A. Dong, W. Yuan, C. Hou and G. Chen, Representations and operations on reflexive subspace lattices, Scientia Sinica Mathematica, 42(4), 321-328, 2012.
6. C. Hou and W. Yuan, Minimal generating reflexive lattices of projections in finite von Neumann algebras, Math. Ann., Vol 353, Issue 2, 499-517, 2012.
5. L. Wang and W. Yuan, A new class of Kadison-Singer algebras, Expo. Math., 29, 126-132, 2011.

4. W. Wu and W. Yuan, The crossed product von Neumann algebras associated with $SL_2(\mathbb{R})$, Taiwanese Journal of Mathematics, 14(4), 1501-1515, 2010.
3. L. Ge and W. Yuan, Kadison-Singer Algebras, II: General Case, Proc.Nat.Acad.Sci.U.S.A., Vol 107,no.11, 4840-4844, 2010.
2. L. Ge and W. Yuan, Kadison-Singer Algebras, Hyperfinite Case, Proc.Nat.Acad.Sci.U.S.A., Vol.107, no.5, 1838-1843, 2010.
1. W. Wu and W. Yuan, A Note on the Crossed Product of von Neumann Algebras, Acta Mathematica Sinica Chinese Series, 51(4) 803-808, 2008.

Work in Progress

- B. Fu, L. Ge and W. Yuan, On Sarnak's Conjecture.
- L. Ge, W. Wu and W. Yuan, On the sphere invariant automorphisms of finite von Neumann algebras.
- W. Wu and W. Yuan, On the unbounded operators with trivial bounded commutant in II_1 factors.

Invited Talks at Conferences

Kadison-Singer Algebras, Operator Algebras and Related Topics, Beijing, July 24, 2010.

Invited Seminar/Colloquium Talks

Kadison-Singer Algebras

Qufu Normal University, Department of Mathematics, December 28, 2009.

University of Singapore, Department of Mathematics, May 2, 2009.

On a new class of non selfadjoint algebras

ChongQing University, Department of Mathematics, September 21, 2011.

Unbounded Operator With Trivial Relative Commutant

Dartmouth College, Nov. 2, 2013.

Teaching

Calculus II (426), University of New Hampshire, Autumn, 2013.

Functional analysis II, University of Chinese Academy of Sciences, Spring 2011, 2012, 2013.

Introduction to free probability theory(minicourse), East China University Of Science And Technology, June, 2009.

Seminars Organized

Study seminar on operator algebras (with Liguang Wang), QuFu Normal University, July, 2013.

Study seminar on operator algebras and number theory, Institute of Mathematics AMSS, Fall 2012-Jan. 2013.

Study seminar on operator algebras(with Liming Ge), Morningside Center of Mathematics, 2010, 2011.

Research seminar on operator algebras(with Wenming Wu), Chongqing Normal University, October, 2011.

Professional Service

Refereed articles for research journals:

Expositiones Mathematicae

Science China Mathematics

Acta Mathematica Sinica

Acta Mathematicae Applicatae Sinica

External fundings

NSFC No.11271390, Group factors and its space theory, Co-Principal Investigator.

NSFC No.11301511, On geometric objects in finite factors, Principal Investigator.

NSFC No.11371290, KS-algebras and minimal generating lattices of von Neumann algebras, Co-Principal Investigator.

Honors, Awards

'Zhong Jia Qing' Mathematics Award 2009.

Outstanding Doctoral Dissertation Award of Chinese Academy of Sciences, 2010.